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ABSTRACT

This paper describes the Loyola Center for Educational Improvement's (LCEI) effort to develop a clearinghouse on mastery learning (CML) which would serve as a depository for conceptual and research documents on mastery learning, competency-based education, instructional design, and other related topics. The nature of the clearinghouse is defined and the following projected activities are identified: (1) to update and expand the database searches, (2) to acquire relevant documents, (3) to analyze relevant documents using multiple dimensions for coding and computer retrieval purposes, and (4) to generate and disseminate information analysis products. Six references are listed. (FM)

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Establishing a Clearinghouse on Mastery Learning: Meager Beginnings But Promising Prospects

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Abstract

The proliferation of mastery learning literature over the past decade has acutely intensified the need for the formation of a specific Clearinghouse on Mastery Learning (CML). An initial attempt at establishing such a clearinghouse is currently underway through the Loyola Center for Educational Improvement (LCEI) which is based at Loyola University in New Orleans. It is anticipated that the CML will provide (a) a central depository for mastery learning literature, (b) a document analysis mechanism for delineating the past, current, and future nature and direction of mastery learning efforts, (c) a computerized search and retrieval system to serve the informational needs of mastery learning researchers and practitioners, and (d) an informational network system for parties involved with mastery learning which would coordinate current efforts in the field with past accomplishments and needed future directions. Input from interested individuals and professional organizations is sought regarding the conceptualization, activities thus far, and future directions of the CML.

Establishing a Clearinghouse on Mastery Learning:

Meager Beginnings But Promising Prospects

The production of mastery learning literature has proliferated at an ever-increasing rate since the seminal publications of Carroll (1963) and Bloom (1968) during the 1960's which ushered in a resurgence of interest in the topic. This trend is probably most noticeable when one considers the steady increase in the scope of issues addressed in such benchmark works as Block's (1971) Mastery Learning: Theory and Practice, Bloom's (1976) Human Characteristics and School Learning, Block and Burns' (1976) chapter on "Mastery Learning" in the Review of Research in Education, and, most recently, Bloom's (1980) All Our Children Learning.

Undoubtedly, active mastery learning researchers and practitioners are aware of the various preliminary sources available for identifying completed and ongoing work in this rapidly expanding field. For example, the widespread availability and consistent use of such sources as the ERIC system (namely, Resources in Education and Current Index to Journals in Education), Education Index, Psychological Abstracts, and Comprehensive Dissertation Abstracts enable one to remain current regarding the identification of the conceptual and research literature in mastery learning as they become available.

Even though such data bases as the aforementioned do indeed serve many of the informational needs of mastery learning researchers and practitioners, there appears to be a dire need for the establishment

of a specific Clearinghouse on Mastery Learning (CML) which would serve, among other purposes, as a national/international depository for mastery learning documents. Accordingly, an initial attempt at establishing such a clearinghouse is currently underway through the Loyola Center for Educational Improvement (LCEI) which is based at Loyola University in New Orleans.

Nature of the LCEI Clearinghouse on Mastery Learning

Consistent with the general theme of serving as a depository for conceptual and research literature documents on mastery learning, the CML represents an organizational basis for studying and utilizing completed and ongoing works pertaining not only to the specific topic of mastery learning but also to such closely-related topics as competency-based education, instructional design, the time factor in school learning, criterion-referenced evaluation, and student learning styles. More specifically, the intent of the CML is fivefold in nature: (a) to serve as a catalyst for establishing a national/international information system on mastery learning, (b) to identify, collect, and catalog in one central location all conceptual and research literature directly or tangentially related to mastery learning; (c) to analyze such documents using multiple dimensions so as to make possible a selective computerized search and retrieval system; (d) to generate information analysis products such as state-of-the-art, as well as highly specific, bibliographies and literature reviews; and (e) to accommodate more comprehensively than is presently the case those informational needs of mastery learning researchers and practitioners.

Current Status and Projected Activities of the LCEI Clearinghouse on Mastery Learning

Since the inception of the CML, manual and computer searches have been conducted of the following preliminary sources: ERIC (i.e., Resources in Education and Current Index to Journals in Education), Education Index, Psychological Abstracts, and Comprehensive Dissertation Abstracts. These searches have used descriptive terms directly and tangentially related to mastery learning. Subsequent to the searches, relevant documents have been collected in microfiche, microfilm, or xerox form and cataloged for entry into a computer data file.

So as to accommodate all five of the previously mentioned objectives of the CML, the following projected activities are identified and represent the most immediate concerns of the project:

1. Update and Expand the Data Base Searches. On a monthly basis, manual and computer searches will be conducted of the previously cited data bases--ERIC, Education Index, Psychological Abstracts, and Comprehensive Dissertation Abstracts--so as to update those searches already completed. Additionally, searches will be expanded to include other data bases such as the Smithsonian Science Information Exchange, Conference Papers Index, Science Citation Index, Social Science Citation Index, and Bibliographic Index. With respect to this activity of updating and expanding data base searches, it is of utmost importance that individuals and professional organizations involved directly with mastery learning apprise the CML of completed, ongoing, and projected efforts in this area.

2. Acquire Relevant Documents. As an essential sequel to the aforementioned updating and expansion of data base searches, the acquisition of relevant mastery learning documents must be an ongoing activity. In this matter, also, individuals and organizations are encouraged to forward pertinent materials to the CML or, at the very least, to apprise the CML as to how such materials might be obtained. Quite obviously, this activity of acquiring relevant mastery learning documents is imperative if content analyses are to be conducted.

3. Analyze Relevant Documents Using Multiple Dimensions for Coding and Computer Search/Retrieval Purposes. In order to provide a basis for implementing a selective computerized search and retrieval system, each document must be analyzed with several dimensions in mind. For example, a journal article reporting the results of a mastery learning study done in mathematics at the high school level might be analyzed along the following dimensions: type of literature (conceptual or research), subject area, level of education, research design, independent variable(s), dependent variable(s), and type of mastery learning research (Type I-IV a la Block & Burns, 1976). Such an analysis would provide a basis for including within the bibliographic citation of this study an alphanumeric code which would make possible a selective computer search and retrieval of this citation along with others that have been similarly coded in whole or in part. Thus, a future researcher would have available the option of requesting from the CML a highly

selective computer search and printout of only those bibliographic citations which correspond to, let's say, specific independent and dependent variables that are the focus of the research effort.

This particular activity is, admittedly, quite challenging when one considers the vast range of mastery learning documents that are available and, perhaps, an even more extensive list of possible dimensions that could be used in analyzing and coding each citation. Consequently, an appeal is made here for suggestions from interested individuals and organizations regarding dimensions that would be most appropriate and useful for the analysis and coding tasks.

4. Generate and Disseminate Information Analysis Products. The successful completion of the three previously cited activities should make possible the production and dissemination of such information analysis outcomes as state-of-the-art bibliographies, highly specific bibliographies, and literature reviews. Furthermore, an impetus should be given to the tasks of (a) synthesizing the available mastery learning research in a given area--perhaps via a meta-analysis process--and (b) conceptualizing a mastery learning taxonomy and research paradigm that would direct future research and development efforts.

Concluding Statements

Of particular importance in this attempt to establish a Clearinghouse on Mastery Learning is the provision of (a) a central depository for mastery learning documents, (b) an analysis procedure for delineating the past, current, and future nature and direction

of mastery learning efforts, (c) a computerized search and retrieval system to serve the informational needs of researchers and practitioners, and (d) an informational network system for individuals and professional organizations involved with mastery learning which would coordinate current efforts in the field with past accomplishments and needed future directions.

The success of this endeavor, however, will be contingent in large measure on the supportive reaction of interested parties that hopefully will take the form of (a) apprising the CML of relevant documents via submissions, (b) suggesting bibliographic coding schemes that would most extensively make use of the planned computer retrieval capability, and (c) indicating any other types of services the CML might provide beyond those already mentioned in this paper. Such input is welcomed--or, more accurately, essential--if the meager beginnings stated herein are indeed to materialize into more promising prospects.

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